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ABSTRACT

Students' expectancies for their future economic outcomes, differences in expectancies between ethnic groups, and the relationship of these expectancies to attributions and self-esteem are examined in two studies (Study 1, N=746; Study 2, N=2,130). An ANOVA was used. Study 2 is part of the first wave of a longitudinal study. Results indicate that African Americans in their first year of college have high expectations for future outcomes; however, this optimism declines significantly during college while optimism of other students remains stable. The studies focus on two possible explanations for the decline in expectancies: (1) the self-esteem hypothesis, which maintains that African American students' evidence decreasing self-esteem following social comparisons between African American students and other students; (2) the external attribution hypothesis, which holds that African American students' increasingly perceive that they personally face external barriers not faced by other students. Results are consistent with the interpretation that it is African American students' perceptions of society that are changing during college, not their perceptions of self. Measures for Study 1 and Study 2 are appended. (EMK)

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Declining Expectancies in African American College Students: The Influences of Attributions and Self-Esteem across the College Years

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Abstract

This study examines students' expectancies for their future economic outcomes. The focus is on differences in expectancies between ethnic groups, and the relationship of these expectancies to attributions and self-esteem. In two studies, college students completed measures of economic expectancies, self-esteem and attributions for future outcomes. The results indicate that African Americans in their first year of college have high expectations for future outcomes. However, this optimism of African American students declines significantly during college, while that of other students remains stable. The studies focus on two possible explanations for the decline in expectancies: a) the self-esteem hypothesis, which maintains that African American students' evidence decreasing self-esteem following social comparisons between African American students and other students, and b) the external attribution hypothesis, which maintains that African American students' increasingly perceive that they personally face external barriers not faced by other students.

The results are consistent with the hypothesis that it is African American students' perceptions of society that are changing during college, not their perceptions of the self. While African American students' expectancies decline during college, their self-esteem remains stable and their attributions for their outcomes become more external. Moreover, a dissociation occurs such that while there is a relationship between self-esteem and expectancies for White/Asian students, there is no such relationship for African American students. The results suggest that African American students start college optimistically, believing that they can overcome the barriers faced by African Americans in society, but that they become increasingly pessimistic about this prospect as they go through college.

Declining Expectancies in African American College Students: The Influences of Attributions and Self-Esteem across the College Years

The academic under-achievement of African Americans is one of the most striking examples of inequality in the United States. The severity of the problem is illustrated by the illiteracy rate which runs as high as 40% among minority youth, compared with 13% among all 17-year olds in the United States (see National Commission on Excellence in Education, 1983). Most alarming is that the differences in achievement between African American students and White students increase with age. For example, while the math performance of African American students is 14% below the national average at age 9, by age 17, this gap has grown to 20% (data derived from Holmes, 1982).[2] Similar differences between African American and White students are observed in higher education. For example, African American students graduate from college with a grade point average that is two-thirds of a letter grade below that of White students (Nettles, 1988). More disturbing evidence comes from findings that the majority of African American students who start college never obtain a bachelors degree (Billson & Terry, 1982; Bynum & Thompson, 1983; Fleming, 1984; McCauley, 1988; Suen, 1983): The national dropout rate for African Americans in college is 70%, compared to only 42% for all college students (Nettles, 1988).

Since the 1960s, social scientists have devoted much attention to the academic achievement of African American students. Theoretical models of African American under-achievement can be divided into two mayor types: Those that stress the inherent characteristics of African Americans (inherency approaches) and those that stress the influence of the environment in which African Americans live (situational approaches) (see Sidanius and Pratto, in press, for a

detailed discussion of such models). While the theoretical models help to organize and comprehend large numbers of disparate findings, much of the research on ethnic differences in academic achievement has been atheoretical. This has led to long listings of predictors of academic achievement that, in the absence of theory, are difficult to combine into a coherent account (e.g. Allen & Haniff, 1991; Astin, 1993; Bennett & Okinaka, 1990; McCauley, 1988; Pascarella, Terenzini & Wolfle, 1986). Examples of such predictors of academic achievement are the students' achievement prior to college, socioeconomic status, parental aspirations, the characteristics of faculty, place of residence, the students' level of involvement with the campus, and the students' peer group (see van Laar, 1997 for a review). It is apparent that there is a need to move beyond the descriptive level to a more in-depth analysis of the relationship amongst the variables related to college achievement, and an analysis of their interactions with ethnicity in the determination of achievement behavior.

Two conclusions do emerge from research on predictors of college achievement. The first is that academic achievement is not accounted for by a single factor (see also Pascarella and Terenzini, 1991). Specifically, theories of academic achievement should take into account affective and cognitive variables, in addition to economic and social constraints. The second conclusion is that the predictors associated with academic achievement in African Americans are somewhat different than the predictors associated with achievement in White students (e.g. Baly, 1984; Bennett & Okinaka, 1990; Cosby & Picou, 1973; Dillard & Campbell, 1981; Gerardi, 1990; Lee, 1984; McCauley, 1988; Porter, 1974). There is some evidence that factors perceived as key predictors of achievement, such as high school achievement and self-esteem, are more successful

in predicting achievement for White students than for African American students (e.g. Baly, 1984).

As a whole, the studies have not been very successful at explaining the differences in academic achievement between Black and White college students. One reason for this failure may be that the focus has been too much on influences from the past and too little on college students' perceptions of their future. Over the past two decades, students increasingly report that the most important outcome of attending college is the economic return of obtaining a better job or making more money (Astin, 1993; Dey, Astin & Korn, 1991). Moreover, individuals are valued and value themselves to the extent that they achieve academic, occupational, or material success (Giorgi & Marsh, 1990; Hughes & Demo, 1989).

While much research has found that African American students evidence lower academic achievement than White students, African American students appear to maintain positive self-concepts and positive views of their abilities (for reviews, see Graham, 1994; Hoelter, 1983; Major & Crocker, 1989, 1993; Porter & Washington, 1979; Rosenberg, 1979; Wylie, 1979). According to the perspective to be presented here, these paradoxical findings can be reconciled through an examination of the causal explanations African American college students make for their performance. Two hypotheses are proposed, both based in Weiner's attributional theory of motivation and emotion. A "self-esteem" hypothesis, which reflects research on self-esteem and performance, maintains that African American college students internalize the negative stigma placed on them by the social system, and blame themselves for their lower outcomes. In contrast, a second hypothesis maintains that rather than making internal attributions for failure, African American college students become aware of the structural barriers to their performance, and begin

to make external attribution for their relative failure. Such external attributions will allow African American students to maintain positive views of the self (see also Crocker, Voelkl, Testa & Major, 1991; Major & Crocker, 1989, 1993; Major, Feinstein & Crocker, 1994), but will lead to low expectancies for future outcomes.

The argument advanced in this paper is that internal attributions for failure are not advantageous for African American students, as they lead to self-blame and reduce African Americans' ability to make sense of a social system in which their outcomes are in part influenced by their group membership (also see Oyserman, Gant & Ager, 1995). In support of this, evidence from attributional research indicates that an individuals' attributions for his or her outcomes are key in determining achievement behavior. Indeed, this research indicates that the effect of attributions on behavior is mediated by the individuals' expectancies and by the affect that results from causal attributions (see Weiner, 1986, 1992). Before describing the hypotheses in more detail, attributions and expectancies, the two theoretical concepts central to the perspective advanced here will be presented.

Attributions

Attribution is the process by which the social perceiver uses information to make inferences about the causes of events. Attribution theory examines how this information is gathered and combined to make a causal judgment. While attribution theory is a collection of diverse theoretical accounts that are concerned with generic causal principles, attributional theories have been developed to account for the attribution process in specific life domains (Fiske & Taylor, 1991). Weiner developed an attributional theory of motivation and emotion (1986)

which asserts that individuals' explanations of events influence their motivation and performance. It is Weiner's theory that forms the basis for the perspective in this paper.

A summary of Weiner's attributional theory is presented in Figure 1. As Figure 1 shows, the attributional process begins when we experience an achievement outcome, such as success or failure. This outcome is followed by an immediate affective reaction, such as happiness or sadness which Weiner and colleagues call 'outcome dependent emotions' (also see Graham, 1991). A causal search will then be instigated to determine the cause of this event. Such a search is especially likely if the outcome is negative, unexpected, or important (Hastie, 1984; Kelley & Michela, 1980; Pyszynski & Greenberg, 1981; Wong & Weiner, 1981). The search is guided by previous existing knowledge we have about our achievement in similar domains, by social comparison information, and by various causal schemas of representative causes for this specific situation (see Weiner, 1986, 1992). Once a cause is determined, it is theoretically located along causal dimensions. Weiner identified three such basic dimensions of causes: locus of causality, controllability (by self and others), and stability. The locus of causality dimension describes whether the outcome is perceived to be caused by internal states or external forces. The controllability dimension represents 'who' has control over the cause. Causes can be perceived to be under the control of the self, under the control of others, or under no one's control. Finally, the stability dimension refers to whether the cause is perceived as invariant or as changeable over time.

In addition to identifying the basic causal dimensions, Weiner proposed particular psychological consequences for each dimension. These consequences have been confirmed in subsequent research (see Weiner, 1995, 1996). The locus of causality dimension is associated with

pride and other esteem-related emotions. We feel pride when we succeed because of our personal characteristics, whereas low self-esteem results from attributing failure to these internal characteristics. The controllability dimension is associated with social emotions. Examples of these emotions are guilt, shame, anger and gratitude. We feel guilt when we perceive the cause of our failure as something internal to us over which we have control, whereas shame is felt when we perceive the cause as internal to us, but we believe we have no control over the cause. We feel angry when we believe that an external cause that was controllable by others determined our failure, whereas we feel gratitude when this same external controllable cause determined our success. While the locus and controllability dimensions have mainly affective consequences, the stability dimension is the primary determinant of expectancies. We tend to assume that outcomes are a good indicator of future outcomes when they are caused by stable factors, but not when they are caused by unstable factors (Weiner, 1995; Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1987).

Apart from confirming the relationship between the primary causal dimensions and cognitive and affective variables, research based on Weiner's attributional model has also confirmed that attributional processes are important determinants of behavior. As is shown in Figure 1, Weiner hypothesized that the effects of causal dimensions on behavior are mediated by future expectations and emotional reactions to achievement outcomes. Specifically, internal attributions for failure will lead to low self-esteem, and low self-esteem will lower motivation, leading to inaction. Other consequences for motivation will depend on perceptions of the stability and controllability of the cause. For example, attributions for failure to factors which are perceived as controllable by others are likely to lead to anger, and are likely to increase motivation

to address the injustice. Attributions for failure to stable factors will lower expectancies, and in turn, such lower expectancies are likely to lead to performance deficits.

Expectancies

While expectancies are an important outcome of the attributional process as defined by Weiner (1986, 1992), other research and theory in personality and social psychology has also established the essential role of expectancies as determinants of goal directed behavior. Much of the work on expectancies has been conducted in the context of expectancy-value theories (e.g. Atkinson, 1964; Rotter, 1966). Rotter (1954) defined an expectancy as 'the probability held by the individual that a particular reinforcement will occur as a function of a specific behavior on his part in a specific situation' (p. 107). In Weiner's attributional theory of motivation and emotion, expectancies are determined by perceptions of stability. Outcomes that are perceived to result from stable causes are expected to reoccur, whereas there is uncertainty regarding the future occurrence of outcomes that result from unstable causes. Such expectancies then act as important determinants of achievement behavior.

In this paper, the focus is on a particular type of expectancy, namely the expectancy an individual has for his or her future economic outcomes. This refers to the subjective expectancy an individual has of the social status and economic well-being he or she will achieve. Expectancies, as discussed in this paper, have three important characteristics. First, the focus is on subjective expectancies, not the objective expectations that might be presumed to be present [see also Lewin (1951) and contrast with Brunswik's (1951) emphasis on objective probabilities]. Second, expectancies are tied to a causal sequence in which the individual believes that a specific

reinforcement will follow certain behaviors. Therefore, economic expectancies are bound to an individuals' behavioral intentions with regard to education and training, and the effort he or she intends to exert. Third, economic expectancies are embedded in a social context. They are constrained by individuals' perceptions of the social system in which their behaviors occur.

Two Accounts of Achievement in African American College Students

A consideration of expectancies and attributions brings us to two accounts that can help explain differences in achievement between Black and White students. Both are based on Weiner's attribution model (Weiner, 1986, 1992). A basic assumption of these accounts is that the social psychological world African American students face is different than the one White students face, and that their attributions will vary as a direct result of differences in these social worlds. In turn, the affect and expectancies that follow from these attributions are hypothesized to influence achievement behaviors. Thus it is hypothesized that the general attributional processes as outlined by Weiner apply to both African American and White students, and that differences between the two groups in achievement are due to differences in the causes they perceive to be responsible for their outcomes. This is consistent with a central aspect of Weiner's attributional theory, which holds that attributional judgments are phenomenological: they depict the causal world as perceived by the actor (see also Graham, 1991).

An examination of motivation in African American college students requires a specification of the social psychological situation which is presumed to be facing African

American students. In describing this situation, I will confine the discussion to the situation assumed to be facing African American students attending historically White universities.

Given the ethnic and socioeconomic segregation evident in American schools, African American college students are likely to have attended high schools that were more homogeneous in terms of ethnicity and socioeconomic status. In support of this, an examination of schools in the twenty largest cities in the United States reveals that the average Black student attended a high school in which only 19% of students were White (Farley, 1987). Also, given the economic gap between White and African Americans in society as a whole, the high schools African American college students attended are likely to serve students that are lower in socioeconomic status than the students at the university these African American students are now attending. This high school environment is therefore in many ways a 'sheltered' environment that does not expose students to individuals of different ethnic or socioeconomic groups. Research on social comparison suggests that people's feelings about themselves are more influenced by those in their immediate social environment than by the larger society (e.g. Powers et al. 1971; Rovner, 1981; Simmons, 1978; Soares & Soares, 1969). As such, one result of the segregation evident at the high school level would be that social comparisons at high school tend to be with those who were very similar to the student. In addition, assuming that the African American students who are now at college were in general high achievers, these social comparisons at the high school level were likely to consist of downward social comparisons - that is, comparisons with students who were, in general, doing less well.

According to the perspective presented here, students of all ethnic groups come to the universities with a history of success. First year college students are accustomed to being high

achievers, and African American college students are assumed to be no exception to this general pattern. In addition, I maintain that their experience in high school and in the social world they have encountered up to this point has taught African American students to attribute success and failure to effort and ability (see also Hochschild, 1995). Thus it is hypothesized that African American students, like students of other ethnic groups, come to college with internal attributions for their success, with high self-esteem, and with high expectancies for their future success. Moreover, African American students probably arrive at college with very positive feelings about the self, given the greater achievement going to college may signify for a group that has been greatly underrepresented at higher levels of education.

As there is a substantial correlation between socioeconomic status, ethnicity and college attendance, on arrival at college, African American students are likely to be exposed to students who are higher in socioeconomic status than they are. Also, given that students who attended schools in areas lower in socioeconomic status, and with higher minority enrollment, are likely to have received a lower quality education (see Beilin & Gotkin, 1967; Carnoy, 1974; Cobb & Hops, 1973; Love & Bachera, 1975), then African American students are also likely to be less well prepared for college than other students, and are thus likely to perform less well in college. As reviewed earlier, a great deal of evidence suggests that African American college students do indeed experience failure relative to other students at our universities (e.g. Astin, 1993; Nettles, 1988; Steele, 1992).

A central part of the hypotheses is that not only do African American students experience relative failure, but that this failure becomes framed in ethnic terms in the light of current debate about the relationship between ethnicity and achievement. Examples of this debate are the campus

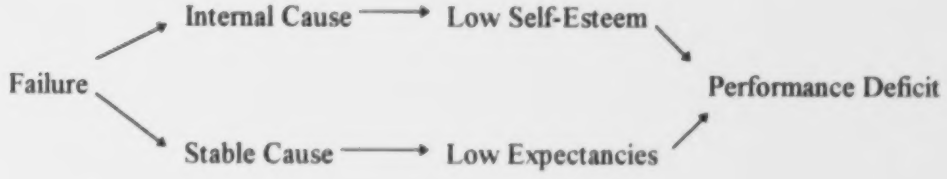
discussions surrounding affirmative action policies, as well as discussions among social scientists on the supposed 'inherent' characteristics of White and African Americans (e.g. see Herrnstein & Murray, 1994). Such debates question the competitiveness of all African American students. Further, the claims of White intellectual superiority gain some apparent legitimacy when African American students start to compare their outcomes to those of other students at the university, and find that indeed it does appear to be the case that White (and Asian) students perform better than they do. It is proposed here that the relative performance of the ethnic groups has become common knowledge, and is widely discussed on campus. Thus, African American college students, aware of such differences, are now forced to make mostly upward social comparisons - comparisons with those who are doing better than they are. In support of this, results from research on social comparison indicates that individuals who are members of low status groups are especially likely to make such comparisons with the higher status outgroup when they are in a numerical minority, which these African American students are (e.g. Crosby, 1982). Such upward social comparisons are likely to lead to the experience of failure relative to other students.

According to this perspective, African American students, for the first time, become painfully aware of a correlation between ethnicity and outcomes in their own environment. Prior to college, the ethnic and socioeconomic homogeneity at the high school level is likely to have protected them from seeing such a correlation at the local level. Such a negative and unexpected outcome, in a domain that is so central to the self-concept, is hypothesized to instigate an attributional search in which the African American student searches for the cause of his or her lower achievement (Weiner, 1986). According to the position advanced here, the attribution an African American student makes for his or her outcomes will play a crucial moderating role in his

or her cognitive, affective, and motivational reactions to these outcomes. This brings us to two accounts of achievement in African American college students: the self-esteem hypothesis and the external attribution hypothesis.

The Self-Esteem Hypothesis

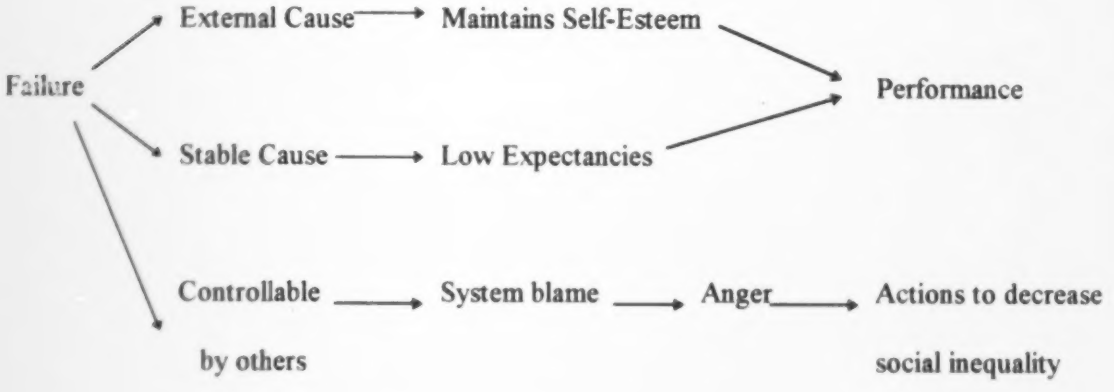
In many colleges today, questions are still being raised about the aptitude of African American students. Often such debates surround controversial policies such as affirmative action programs. In essence, the self-esteem hypothesis argues that when an African American student fails the most available attribution is one to low ability. Therefore, this hypothesis argues that failure relative to other students, combined with the surrounding questions about their aptitude, will lead African American students to attribute failure to internal, uncontrollable factors. This will result in decreases in self-esteem among African American students. In addition, their attribution to a stable factor will lower African American students' expectancies for future outcomes, and will lower their motivation and performance. This process is illustrated below.



The External Attribution Hypothesis

The external attribution hypothesis argues that the self-blame outlined in the self-esteem hypothesis is quite unlikely. Instead, it argues that college attendance is likely to expose and bring awareness to an African American student of the structural barriers facing him or her, and that

African American students will take such limitations on their opportunities into account when evaluating the cause of their relative failure. Therefore, the external attribution hypothesis argues that African American students are likely to make external attributions for their relative failure. Such external attributions prevent self-blame, but do not protect expectancies for the future, resulting in the maintenance of high self-esteem, but decreases in expectancies for future outcomes. The external attribution hypothesis thus proposes that there is a dissociation between self-esteem and expectancies. The consequences for motivation and achievement behaviors will depend on how stable and controllable by others the student perceives these structural inequalities to be. The attributional process is illustrated below.



To examine changes in expectancies, locus of causality and self-esteem across the college years, two studies were conducted among undergraduates at UCLA. The goal of the studies was to compare the predictive power of the self-esteem and external attribution hypotheses. A number of contrasting predictions were derived from the self-esteem and external attribution hypotheses. These predictions were tested in the two studies. Study 1 consists of a cross-sectional comparison

of students across different years in school. In Study 2, data from the first wave of a longitudinal study are analyzed as a replication of Study 1.

According to the self-esteem hypothesis, African American students are evidencing lower achievement in college as they start to doubt their abilities. Therefore the self-esteem hypothesis would predict that attributions should remain internal, that self-esteem and expectancies should decline, and that there should be a relationship between self-esteem and expectancies. These predictions derived from the self-esteem hypothesis were contrasted with those that follow from the external attribution hypothesis. According to the external attribution hypothesis, African American students will not blame the self for lower outcomes, but will instead become aware of the structural barriers facing them. Thus, they will make an external attribution. The predictions derived from the external attribution hypothesis were:

1. While African American students will evidence high expectancies early in college, these expectancies will decline the longer they are in college. No such decline in expectancies will occur for White/Asian students.
2. Self-esteem among African American students will be high and will not decline. Similar results will be found for White/Asian students.
3. Attributions among African American students will be internal early in college, but will become more external the longer African American students are in college. No such declines in internal attributions will occur for White/Asian students.
4. African American students, but not White/Asian students, will evidence a dissociation between self-esteem and expectancies, such that self-esteem will not be related to expectancies

among African American students, but will be related to expectancies among White/Asian students.

Study 1

Method

Participants and Procedure

Students enrolled in psychology courses at the University of California, Los Angeles were recruited to participate in a survey in return for partial course credit. A total of 746 participants took part in the study (461 females and 285 males, and three who did not indicate their gender). Of these participants 42% were White, 44% were Asian/Asian American, and 14% were African American. The questionnaire assessed a) participants' expectancies for economic outcomes for the self and for members of various ethnic groups and socioeconomic groups in the United States, b) participants' attributions for these economic outcomes, c) participants' affective reactions to these outcomes, d) self-esteem. In addition, the questionnaire included demographic variables, questions about experiences at high school and college, and sociopolitical attitudes.

Measures

Expectancies for self. The measure of expectancies for the self consisted of three items, which assessed participants' general expectancies for their future economic outcomes, as well as their expected income and socioeconomic status (see Appendix A). Scores on these three items were standardized and averaged to create a scale score. A high score on this measure indicates high expectancies (α=.76).

Expectancies for White Americans. The measure of expectancies for White Americans consisted of one item, which assessed participants' expectancies for the future economic outcomes of White Americans (see Appendix A). A high score on this measure indicates high expectancies.

Locus of causality for outcomes. The measure of locus of causality for future economic outcomes consisted of four items. Participants were asked to what extent their future economic outcomes would be influenced by their ability, their effort, and society. A fourth item asked participants to what extent their outcomes would be due to personal characteristics versus factors in society (see Appendix A). The third and fourth items were reverse scored so that a high score indicates internal attributions. For each participant, scores on the four items were standardized and averaged to form a scale score (α=.54).

Self-esteem. The ten item Rosenberg self-esteem scale was used to measure self-esteem (Rosenberg, 1965; see Appendix A). Items 3, 5, 8, 9 and 10 were reverse scored so that a high score indicates high self-esteem. Scores on the ten items were summed and averaged to create a scale score (α=87). The Rosenberg self-esteem scale was added at a later stage, and therefore data for this scale was available for a sub-sample of 340 participants.

Results

To provide more power for the analyses, the ethnicity and year in college variables were dichotomized.[3] For the year in college variable, participants were divided into two groups: freshmen and sophomores versus juniors and seniors. For the ethnicity variable, participants were divided into African American versus White/Asian participants.

Changes in Expectancies

According to prediction 1, the expectancies of African American students, but not of White/Asian students, will decline across years in college. To assess changes in expectancies across year in college, a 2 (ethnicity: Black versus White/Asian) x 2 (year in college: freshmen/sophomores versus junior/seniors) ANOVA was conducted, using expectancies for self as the dependent variable (three items, α=.76). As expected, there was a significant interaction between ethnicity and year in college, $F(1, 744) = 3.95$, $p = .047$. As Figure 2 shows, while Black students have higher economic expectancies than White/Asian students in the first two years of college, these expectancies decline significantly during college. Pairwise comparisons indicate that Black freshmen/sophomores have higher expectancies than Black juniors/seniors, White/Asian freshmen/sophomores and White/Asian juniors/seniors ($p < .05$).[4]

Note that while this result appears to suggest that Black students are initially more positive than White/Asian students about the future, this is due to a different use of the response alternatives. Specifically, a paired t-test compares the beliefs African American students have for the self (on item 1 of the three-item scale) with those they hold for White Americans (see Appendix A for actual item) shows that African American students do indeed think that White Americans will be better off than they are. Specifically, the results show that African American students' expectancies for White Americans ($M = 6.03$, $SD = 0.77$) are higher than their expectancies for the self, $M = 5.66$, $SD = 0.90$, $t(95) = -2.88$, $p = .005$.

Changes in Self-Esteem

According to prediction 2, the self-esteem of neither Black students nor White/Asian students will decline across years in college. To assess changes in self-esteem across years in

college a 2 (ethnicity: Black versus White/Asian) x 2 (year in college: freshmen/sophomores versus juniors/seniors) ANOVA was conducted, using scores on the Rosenberg self-esteem scale as the dependent variable (ten items, α=.87). There was no interaction between ethnicity and year in college, $F(1, 333) = 2.08$, p=.15. As Figure 3 shows, in support of the external attribution hypothesis, and contrary to the self-esteem hypothesis self-esteem among Black students does not decline across the college years. In fact, self-esteem increases among Black students (although pairwise comparisons show that this change is not significant), and it is among White/Asian students that a decline in self-esteem occurs ($p < .05$).

Changes in Locus of Causality

According to prediction 3, the attributions of Black students, but not of White/Asian students will become less internal across years in college. To assess changes in locus of causality for future economic outcomes across year in college, a 2 (ethnicity: Black versus White/Asian) x 2 (year in college: freshmen/sophomores versus junior/seniors) ANOVA was conducted, using locus of causality for future economic outcomes as the dependent variable (four items, α=.54). As expected, there was a significant interaction between ethnicity and year in college, $F(1, 701) = 9.07$, $p = .003$ (see Figure 4). Pairwise comparisons reveal that Black freshmen/sophomores make significantly more internal attributions than the other three groups ($p < .05$). Also, Black juniors/seniors make significantly more external attributions than Black freshmen/sophomores and White/Asian freshmen/sophomores ($p < .05$).

Relationship between Expectancies and Self-Esteem

To assess whether there is a dissociation between self-esteem and expectancies for Black students, as noted in prediction 4, regression analyses were conducted, using self-esteem as the

independent variable and expectancies as the dependent variable. The simple slopes of self-esteem for Black students and White/Asian students were then examined (see Aiken & West, 1991 for a discussion of this method used to examine interactions in regression analyses).

The results indicated that, as predicted, there was a significant interaction between ethnicity and self-esteem, $\beta = .30$, $p = .02$. Simple slope analyses showed that while the relationship between self-esteem and expectancies is highly significant for White/Asian students, $\beta = .40$, $p = .0000$, there is no significant relationship between self-esteem and expectancies for Black students, $\beta = .09$, $p = .41$. These results are illustrated in Figure 5.

Study 2

Study 2 consists of data from the first wave of an ongoing longitudinal study of UCLA students. The data were collected in 1996, during the summer immediately preceding the students' college entry. This study is part of a larger project, funded by the Russell Sage Foundation, which investigates the effects of the multicultural college environment on intergroup tension.[5] This project will continue for the next four years. The data available at present provides an opportunity to examine freshmen's expectancies, attributions, and self-esteem using different measures in a new sample of students, coming in at a different time period, and sampled under different conditions.

As the data presently available include only freshmen students, the following modified (m) predictions were examined:

1_m. At college entry, African American students (and White/Asian students) will evidence high expectancies.

2_m. Self-esteem among African American students will be high at college entry. Similar results will be found for White/Asian students.

3_m. Attributions among African American students will be internal at college entry. Similar results will be found for White/Asian students.

Method

Participants and Procedure

Incoming freshmen attending summer orientation seminars at the University of California, Los Angeles were recruited to participate in a survey. A total of 2130 entering freshmen (56% females and 44% males) completed the survey. Of these participants, 35% were White, 35% were Asian/Asian American, and 3% were African American. The questionnaire included questions about high school experiences, contacts with members of various ethnic groups, and expectancies of the campus environment. In addition, the questionnaire assessed inter-ethnic attitudes, sociopolitical attitudes and various demographic factors. A 81% response rate was obtained.[6]

Measures

Expectancies for self. The measure of expectancies for the self consisted of two items, which assessed participants' expected income and socioeconomic status (see Appendix B). Scores on these two items were standardized and averaged to create a scale score. A high score on this measure indicates high expectancies (α=.79).

Locus of causality for outcomes. The measure of locus of causality for future economic outcomes consisted of three items. The first item asked participants to what extent their future economic outcomes would be due to personal characteristics versus factors in society. The second

and third item asked participants to what extent their future outcomes would be due to personal characteristics versus factors in society if they failed (item 2) or succeeded (item 3) (see Appendix B). The items were reverse scored so that a high score indicates internal attributions. For each participant, scores on the three items were standardized and averaged to form a scale score (α=.59).

Self-esteem. Four items from the Rosenberg self-esteem scale were used to measure self-esteem (Rosenberg, 1965; see Appendix B).[7] Items 3 and 4 were reverse scored so that a high score indicates high self-esteem. Scores on the four items were standardized, summed and averaged to create a scale score (α=78).

Results

To maintain consistency with Study 1, the ethnicity variable was again dichotomized. Participants were divided into African American versus White/Asian participants.[8]

Expectancies by Ethnicity

An examination of the means on the two items that make up the expectancies scale indicate that, in general, the participants have high expectancies for future outcomes. The average socio-economic status they expect to have in twenty years time is 5.39 (SD = 1.08) which indicates that they expect to obtain upper middle class or lower upper class status. Similarly, the mean on the expected income item (M = 9.35, SD = 3.33) indicates that on average, students expect to earn between $80,000 and $100,000 in twenty years time, assuming no inflation.

To examine any differences in expectancies between Black and White/Asian students, the two items were standardized and averaged to create a scale score. A one-way ANOVA was conducted using ethnicity (Black versus White/Asian) as the independent variable and

expectancies for self as the dependent variable. As Figure 6 shows, Black students have higher economic expectancies than White/Asian students at college entry, $F(1, 1488) = 9.72$, $p = .002$. An examination of the means on the original items gives a clear picture of the differences between Black and White/Asian students: The means on the unstandardized expected-earnings item indicates that Black students ($M = 10.37$, $SD = 3.31$) expect a salary that is on average $10,000 higher than White/Asian students do ($M = 9.30$, $SD = 3.32$). Similarly, the mean of Black students on the unstandardized 7 point expected socio-economic status item ($M = 5.74$, $SD = 1.14$) is higher than that of White/Asian students ($M = 5.37$, $SD = 1.07$).

Self-Esteem by Ethnicity

According to prediction 2_m, the self-esteem of both Black students and White/Asian students will be high at college entry. To examine levels of self-esteem, the means on the original unstandardized seven-point scale were examined (the two negative items were recoded, such that high numbers indicate high self-esteem). The means indicated that, as expected, both Black ($M = 5.91$, $SD = 1.09$) and White/Asian students ($M = 5.31$, $SD = 1.11$) have high self-esteem at college entry (see Figure 7). Moreover, a one-way ANOVA showed that the difference in self-esteem between Black students and White/Asian students is significant, $F(1, 1535) = 18.29$, $p = .000$.

Locus of Causality and Ethnicity

According to prediction 3_m, the attributions of Black students (and of White/Asian students) are internal at college entry. To investigate levels of locus of causality by ethnic group, the means on the unstandardized scale were examined (the items were recoded, such that high numbers indicate internal attributions). The means indicated that, as expected, both Black ($M = 4.97$, $SD = 1.10$) and White/Asian students ($M = 4.88$, $SD = 1.11$) make internal attributions at

college entry (see Figure 8). A one-way ANOVA showed that, unlike in Study 1, there are no significant differences in locus of causality between Blacks and White/Asian students at college entry, $F(1, 1534) = 0.48$, $p = .49$.

Discussion

The perspective put forth in this paper is that African American college students' causal explanations are important determinants of their achievement behavior. Two studies examined the relationships between expectancies for future economic outcomes, locus of causality and self-esteem among college students. As expected, the results of both studies indicate that in the early years of college, African American students have high expectancies for their future economic outcomes. Also, Study 1 demonstrates that these expectancies decline significantly during the years in college. No such decline occurs for White/Asian students.

Two contrasting explanations for this decline in expectancies were proposed. The self-esteem hypothesis holds that such a decline in expectancies can be accounted for by African Americans students' increasing doubt about their abilities. According to the self-esteem hypothesis this doubt about abilities will result in declining self-esteem. The self-esteem hypothesis therefore predicts that African American students will evidence a decline in self-esteem across the college years, and that attributions for outcomes will remain internal for African American students. Also, the self-esteem hypothesis maintains that self-esteem should be related to expectancies for African American as well as for White/Asian students.

In contrast, the external attribution hypothesis maintains that the decline in expectancies among African American students can be explained by the increasingly external attributions these students are making. Therefore, the external attribution hypothesis predicts that the attributions of

African American students should become more external over the college years. Moreover, the external attribution hypothesis proposes that such external attributions will serve a self-protective function for the students, such that the self-esteem of African American students will remain high at the same time as their expectancies are declining. Lastly, the external attribution hypothesis proposes that African American students will evidence a dissociation between self-esteem and expectancies, such that their feelings about the self will be unrelated to their expectancies for the future, while no such dissociation will be found for students of the other ethnic groups.

As expected, the results from both studies showed strong support for the external attribution hypothesis, and no support for the self-esteem hypothesis. In support of the external attribution hypothesis, and contrary to the self-esteem hypothesis, the self-esteem of African American students remains higher than that of the other students throughout college, and evidences no decline. Such high self-esteem among African American students, despite low achievement, has consistently been found in previous literature as well (for reviews see Graham, 1994; Hoelter, 1983; Hughes & Demo, 1989; Porter & Washington, 1979; Rosenberg, 1979; Wylie, 1979). The attribution results also support the external attribution hypothesis. Specifically, the results of Studies 1 and 2 show that African American students enter college with high internal attributions. In Study 1 the attributions of African American students are even more internal than those of White/Asian students, while Study 2 found their attributions to be equally internal as those of White/Asian students. As expected, while African American students start out with highly internal attributions, Study 1 showed that by the last two years of college African American students make more external attributions than other students. Moreover, in support of the external attribution hypothesis and contrary to the self-esteem hypothesis, Study 1 showed that a dissociation occurs between self-esteem and expectancies for African American students, such

that self-esteem is not related to expectancies for African American students while there is a relationship between self-esteem and expectancies among White/Asian students.

The results suggest that early in college African American students are more convinced than other students that their future outcomes are in their own hands. However, the longer African American students stay in college, the more negative they become about their future outcomes. Moreover, the longer they stay on college, the more African American students perceive that their future outcomes will be influenced by structural factors in the society around them. At the same time that they become increasingly negative about their future, African American students' feelings about the self remain very positive. In fact, a dissociation occurs such that, unlike other students, African American students' expectancies for the future become separated from their feelings about themselves. Such a dissociation is consistent with a process in which African American students feel that their future outcomes have little to do with their personal characteristics. It appears that while African American students enter college believing they can overcome the barriers, during their time in college African American students become increasingly pessimistic about the possibility of overcoming the limits on their opportunities.

The results of this study leave unanswered some important questions, which we are examining in current research. The first concerns the motivational consequences of the disillusionment experienced by African American college students. The declining expectancies and increasingly external attributions noted in this study may lead to hopelessness and lower persistence. Such apathy may emerge in higher attrition rates and lower grades. However, it is also possible that the increasing perception of barriers will make students more motivated to engage in social action against social inequality. Social action may be a more likely outcome than apathy, given that beliefs about the self are protected by the external attributions these students

make. A second question concerns the antecedents of this process. Of particular interest is the influence of the college experience on locus of causality and expectancies. Specifically, the experience of relative failure, and the effects of the negative social environment that surrounds African American students at our colleges should be examined. We are examining these issues in a number of studies currently underway.

An important issue remains, and that is a discussion of individual differences among African American college students, and particularly, how such individual differences may interact with perceptions of inequality in determining achievement behavior. While perceptions of injustice may serve a self-protective function under certain circumstances (e.g. see Crocker, Voelkl, Testa & Major, 1991), there are likely to be important differences between individuals in the way they respond to perceptions of injustice. Specifically, we can propose a distinction between two 'types' of individuals: those who are challenged by injustice and those who are threatened by it (see Tomaka, Blaskovich, Kelsey & Leitten, 1993 for a discussion between threat and challenge).[9] For members of low status groups who perceive inequality as a challenge, perceptions of injustice appear to be adaptive in that they lead to action towards achievement and social change. Well known examples of such individuals are Dr. Martin Luther King and Jesse Jackson. However, 'adaptiveness' is a complex concept. While the greater motivation and performance that results from perceptions of injustice for these individuals may be advantageous in the short term, and certainly may bring benefits to the social group, in the long run such activity, and the responsibility associated with it, may take a great personal toll on the individuals involved, especially under conditions where social change is slow or not forthcoming (see Cose, 1993, for examples).

Moreover, while some members of low status groups will respond to injustice as a challenge, it is likely that others will respond to injustice as a threat - decreasing motivation and withdrawing from the situation. The barriers may appear too great, and members of low status groups may expect little gain from efforts towards upward mobility or social action. For such individuals, the perception of injustice would serve as an inhibitor of action and achievement, and thus may not be adaptive [10]

More generally, there is a danger that a message of social inequality will threaten individual members of low status groups, leading to lower motivation and performance. In attributional terms, attributions for failure towards stable and uncontrollable (and thus unchangeable) causes would be least adaptive (Weiner, 1986). Similarly, it is important that external attributions for failure are not overused. External attributions for failure will be advantageous to members of low status groups only if they are used judiciously, such that a distinction is made between situations in which structural inequalities impact outcomes, and situations in which causal factors have no impact. This account is therefore consistent with current social psychological accounts of mental health, which maintain that, while positive biases that protect the self are functional, the monitoring of reality is also crucial for survival (Taylor and Brown, 1988). Essentially, external attributions for failure will lead to greatest motivation and performance when they are used as tools that help members of low status groups interpret their experience, when appropriate, as one that is influenced, in part, by structural inequality. Such attributions will allow members of low status groups to identify situations in which actions will be efficacious.

While the results presented in this paper are compelling, the longitudinal data we are collecting at UCLA will allow for a more accurate assessment of changes in individuals'

attribution and expectancies across the college years than the cross-sectional results presented in this paper. Also, it will be important to replicate the results found at UCLA at other universities, to examine whether it is something particular to the college experience of African American students at UCLA that leads to the disillusionment reported in this paper, or whether this process is common to African American undergraduates at other universities as well. We are currently conducting such a study.

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APPENDIX A: Measures for Study 1

Expectancies for the Self

1. What kind of an economic life do you think you will have?

Worst possible life 1 2 3 4 5 6 7 Best possible life

2. Twenty years from now, how much do you think you will personally be earning (assuming no inflation)?

Up to $10,000.....1	$50,001 to $60,000.....6	$100,001 to $110,000..11
$10,001 to $20,000.....2	$60,001 to $70,000.....7	$110,001 to $120,000..12
$20,001 to $30,000.....3	$70,001 to $80,000.....8	$120,001 to $130,000..13
$30,001 to $40,000.....4	$80,001 to $90,000.....9	More than $130,000.....14
$40,001 to $50,000.....5	$90,001 to $100,000....10	

3. Twenty years from now, what will your socioeconomic status be?

Poor..... 1	Upper Middle Class..... 4
Working Class..... 2	Upper Class..... 5
Middle Class..... 3	

Expectancies for White Americans

1. What kind of an economic life do you think White Americans will have?

Worst possible life 1 2 3 4 5 6 7 Best possible life

Locus of Causality for Future Outcomes

Not at all 1 2 3 4 5 6 7 Very much

1) To what extent will your economic life outcomes be influenced by your ability?
2) To what extent will your economic life outcomes be influenced by you trying hard (effort)?
3) To what extent will your economic life outcomes be influenced by society?

4) Overall, will your outcomes be caused more by...

Things about you, such as your ability and the effort you put in 1 2 3 4 5 6 7 Factors in society around you, such as opportunities and the availability of jobs

Global Self-Esteem

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. I feel that I am a person of worth, at least on an equal basis with others.

2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

APPENDIX B: Measures for Study 2

Expectancies for the Self

1. Twenty years from now, how much do you think you will personally be earning (assuming no inflation)?

Up to $10,000.....1	$50,001 to $60,000.....6	$100,001 to $110,000..11
$10,001 to $20,000.....2	$60,001 to $70,000.....7	$110,001 to $120,000..12
$20,001 to $30,000.....3	$70,001 to $80,000.....8	$120,001 to $130,000..13
$30,001 to $40,000.....4	$80,001 to $90,000.....9	More than $130,000.....14
$40,001 to $50,000.....5	$90,001 to $100,000....10	

2. Twenty years from now, what do you think your socioeconomic status will be?

Poor..... 1	Upper Middle Class..... 5
Working Class..... 2	Lower Upper Class..... 6
Lower Middle Class..... 3	Upper Class..... 7
Middle Class..... 4	

Locus of Causality for Future Outcomes

1) Will your economic life outcomes be more influenced by...

Things about you, such as your ability and the effort you have put in 1 2 3 4 5 6 7 Factors in the environment, such as opportunities and jobs

2) If you do well economically, will this be more caused by...

Things about you, such as your ability and the effort you have put in 1 2 3 4 5 6 7 Factors in the environment, such as opportunities and jobs

2) If you do not do well economically, will this be more caused by...

Things about you, such as your ability and the effort you have put in 1 2 3 4 5 6 7 Factors in the environment, such as opportunities and jobs

Global Self-Esteem

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. I feel that I have a number of good qualities.
2. I take a positive attitude toward myself.
3. I certainly feel useless at times.
4. At times I think I am no good at all.

Footnotes

[1] An earlier version of this paper was presented at the Annual Meeting of the Western Psychological Association, Seattle, April 24-27 1997. I am grateful to Katrina Dornig, Mauricio Carvallo, Annie Avenessian and Zoé Shaw for their assistance with data collection, and to Bernard Weiner, Jim Sidanius, David Sears, Sandra Graham, Peter Bentler, Shana Levin, Stacey Sinclair and Pamela Taylor for their helpful comments.

[2] Holmes (1982) reports data from the 1976-1978 National Assessment of Educational Progress, which examines the performance of 80,000 high school students, including approximately 12,800 African American students.

[3] Note that the results were also examined for Black and White participants only, and that the results are equivalent. However, the power to detect significant differences was lower due to the reduced sample size, and thus two of the interactions did not reach statistical significance.

[4] All pairwise comparisons are computed using the least-significant difference test.

[5] The data for Wave 2 were collected in the Spring of 1997, when participants were completing their first year in college. However, the data have not yet become available for statistical analyses. The collaborators on the larger project are Dr. David Sears, Dr. Jim Sidanius, Dr. Marilyn Brewer, Dr. Shana Levin, Stacey Sinclair, Pamela Taylor and myself.

[6] In Summer 1996, 95% of the incoming freshmen participated in these summer orientation seminars. The response rate was calculated by the number of participants ($\underline{N}$ = 2130) as a percentage of all those who participated in the summer orientation who were able to participate in the survey ($\underline{N}$ = 2643). Students who were under 18 and did not have parental consent ($\underline{N}$ = 889) were not included in the calculation of the response rate.

[7] The items were selected for inclusion in the Study 2 questionnaire following an item analysis of the full ten item Rosenberg scale in Study 1. Two positively worded and two negatively worded items were chosen based on their high correlation with the total scores on the full ten item scale.

[8] Note that the results were also examined for Black and White participants only, and that the results are equivalent.

[9] While a dichotomy is proposed here between threat and challenge, such individual differences are much more likely to fall on a continuum. The dichotomy is used for presentational purposes only. Also, no claim is made for the inherent nature of these differences. Indeed, it is quite likely that these individual differences may derive from differential socialization experiences, or even from contextual variations.

[10] However, one could also argue that such individuals are protected from yet further disappointment, and have the opportunity to focus their efforts towards other goals (see Cose, 1993 for a discussion).

Figure 1: Summary of Weiner's attributional theory of motivation and emotion

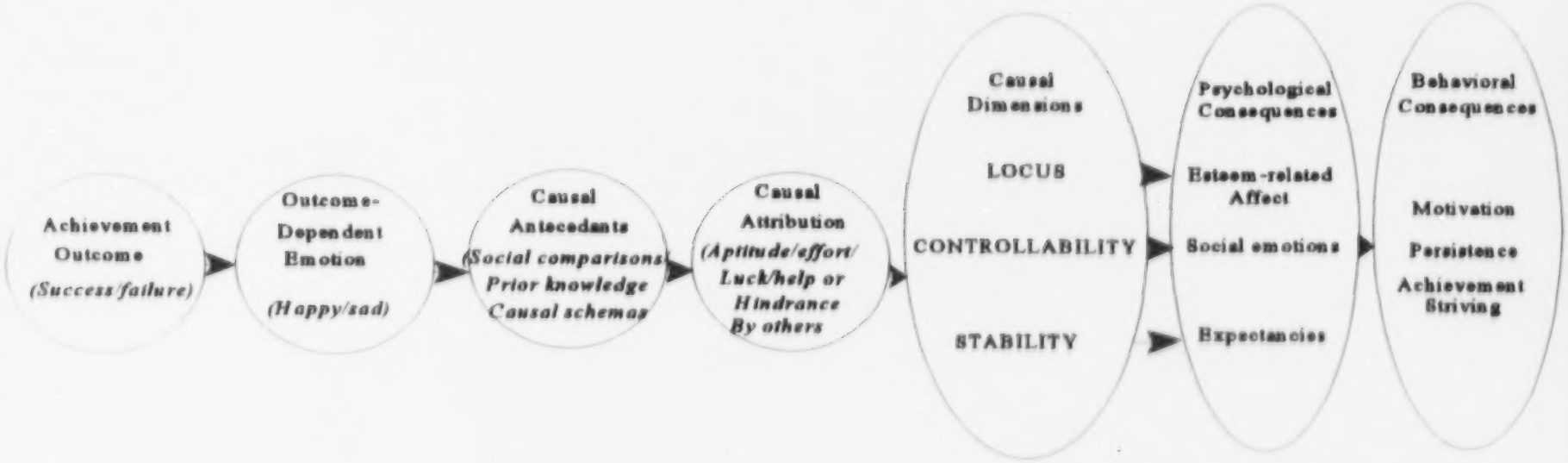

Figure 2

Expectancies by Ethnicity and Year in College

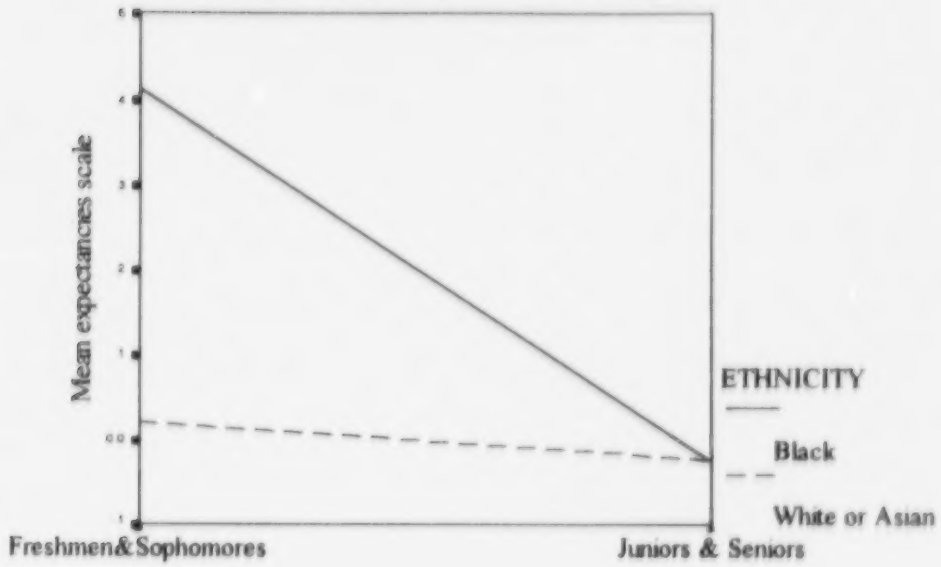

Figure 3

Self-esteem by Ethnicity and Year in College

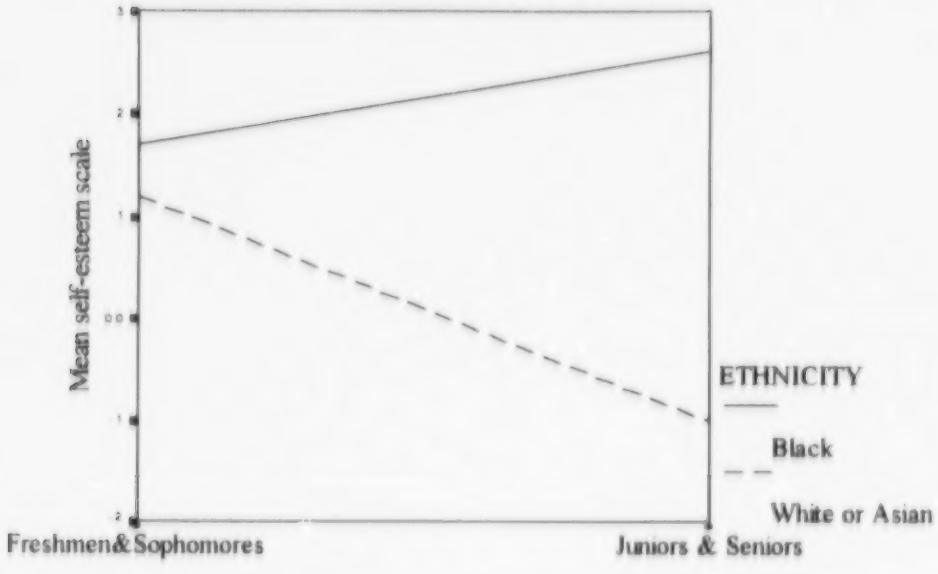

Figure 4

Attributions by Ethnicity and Year in College

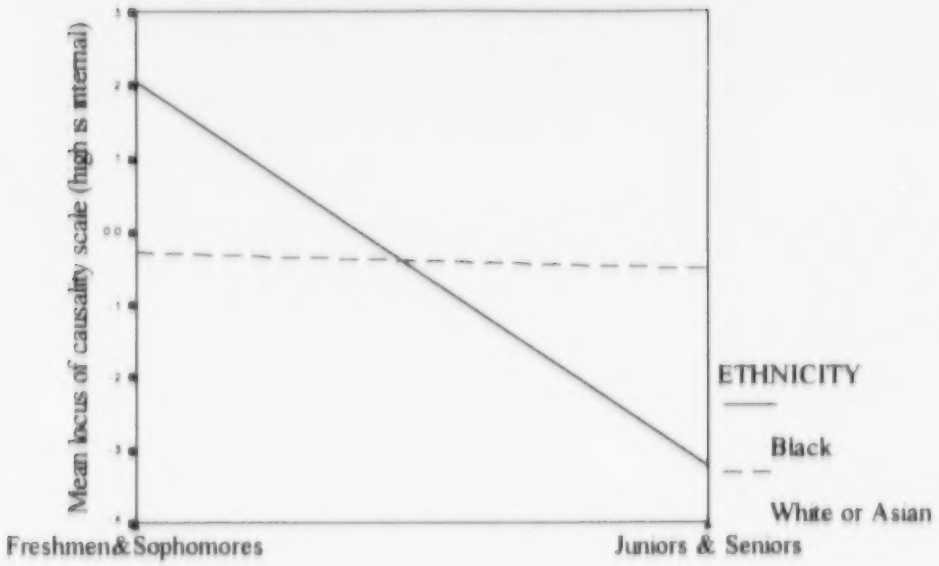

Figure 5

Interaction Ethnicity by Self-esteem

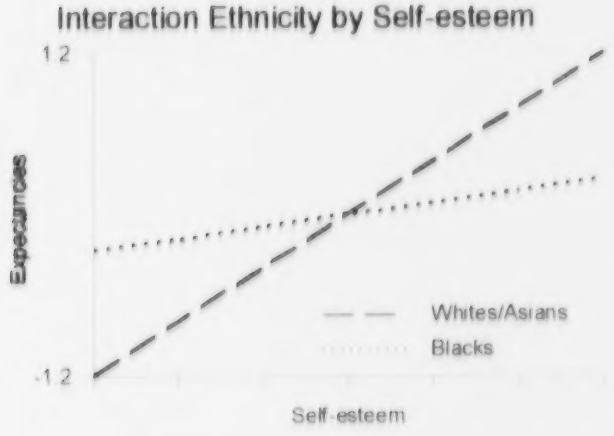

Figure 6

Expectancies by Ethnicity

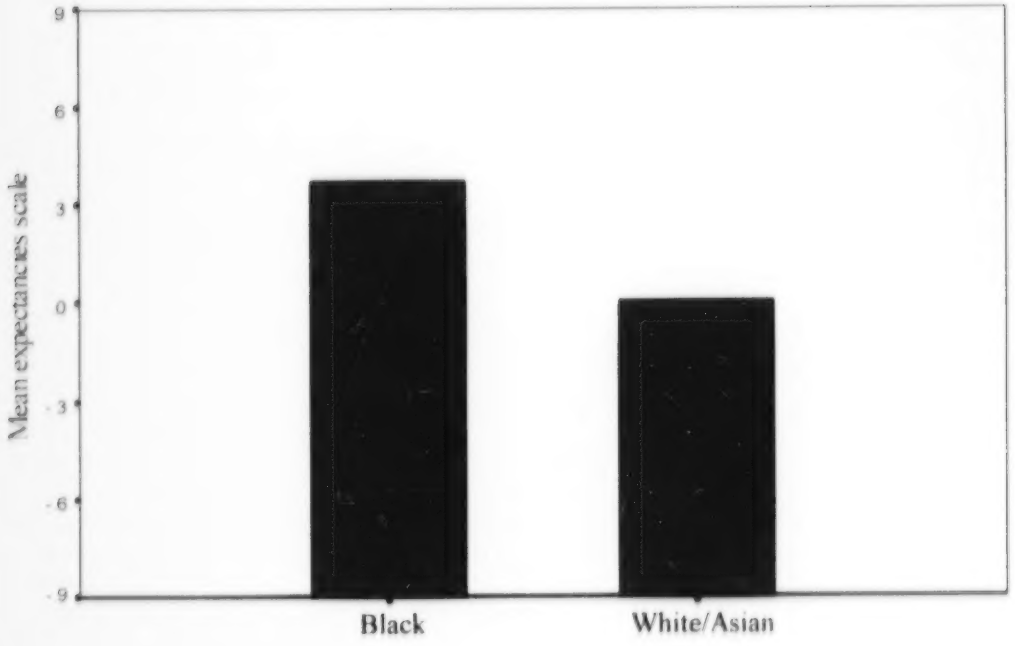

Figure 7

Self-esteem by Ethnicity

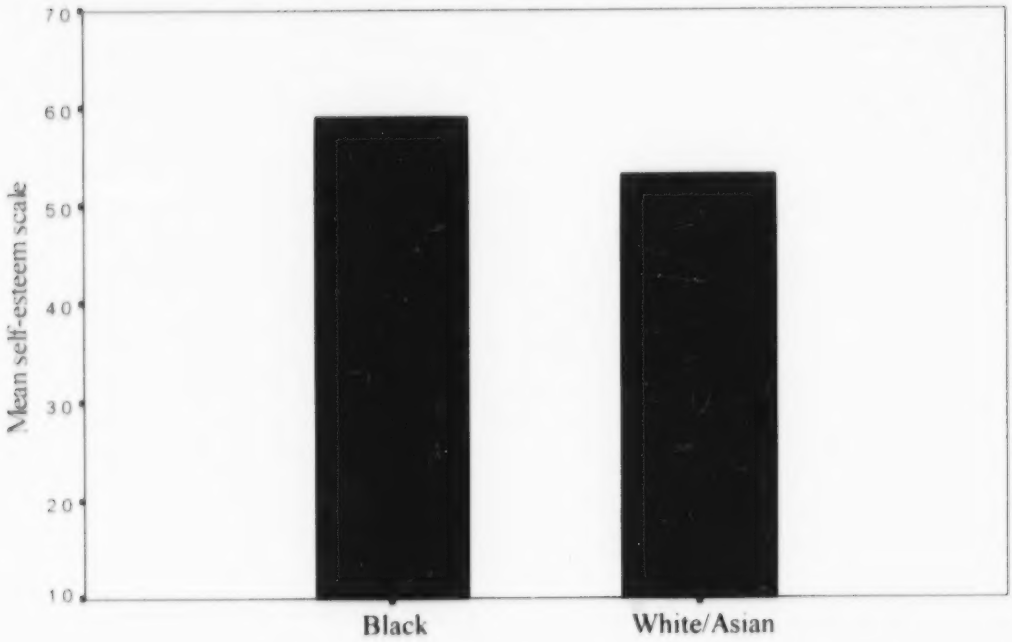

Figure 8

Attributions by Ethnicity